

## **REMARKS**

Upon entry of the amendments in this response, claims 1 - 12, 17 and 19 – 40 remain pending. Reconsideration and allowance of the presently pending claims are respectfully requested.

Applicants also wish to thank the Examiner for a telephone interview of February 3, 2004 in which the claims were discussed. Applicants are in receipt of the Examiner's Interview Summary Form and respectfully agree with its content.

Also note that at the time of filing this Response, Applicants had not yet received an Advisory Action from the Office. Thus, the remarks included herein presuppose that the rejections remain standing. Applicants, therefore, have structured this Response as arguing the allowability of the pending claims against the previously lodged rejections.

### **I. Claim Rejections – 35 U.S.C. § 102**

#### **A. Discussion of Claims 1, 17, and 25**

##### **1. Statement of the Rejection (Claims 1 and 17)**

Claims 1 and 17 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Heuchemer (Deutschland Pat No. 3,905,870 A1), Baumann (US Pat. No. 4,164,178), and Bump (US Pat. No. 5,667,268). More specifically, the Office Action states:

...Heuchemer discloses a storage system comprising a container having a wall with an outer surface and an inner surface and a first open end, the container defining an interior, a closure lid (16) configured to be inserted within the open end and adapted to engage in a sealing relationship with the inner surface; and a compression link (22) having a container engagement surface and a closure lid engagement surface, the compression link being configured to engage between the closure lid and the inner surface to retain the closure lid in sealing engagement with the container, the container engagement surface being configured to extend outwardly from each other, the container engagement surface being adapted to

engage the inner surface and the closure lid engagement surface being adapted to engage the closure lid such that, the closure lid is retained in sealing engagement with the inner surface...

...Baumann discloses a storage system comprising a container having a wall with an outer surface and an inner surface and a first open end, the container defining an interior, a closure lid (12) configured to be inserted within the open end and adapted to engage in a sealing relationship with the inner surface; and a compression link (13,46) having a container engagement surface and a closure lid engagement surface, the compression link being configured to engage between the closure lid and the inner surface to retain the closure lid in sealing engagement with the container, the container engagement surface and the closure lid engagement surface being configured to extend outwardly from each other, the container engagement surface being adapted to engage the inner surface and the closure lid engagement surface being adapted to engage the closure lid such that, the closure lid is retained in sealing engagement with the inner surface...

...Bump discloses a storage system comprising a container having a wall with an outer surface and an inner surface and a first open end, the container defining an interior, a closure lid (20) configured to be inserted within the open end and adapted to engage in a sealing relationship with the inner surface; and a compression link (31,33) having a container engagement surface and a closure lid engagement surface, the compression link being configured to engage between the closure lid and the inner surface to retain the closure lid in sealing engagement with the container, the container engagement surface and the closure lid engagement surface being configured to extend outwardly from each other, the container engagement surface being adapted to engage the inner surface and the closure lid engagement surface being adapted to engage the closure lid such that, the closure lid is retained in sealing engagement with the inner surface...

Office Action at pp. 2-4.

## **2. Response to the Rejection (Claims 1 and 17)**

For a proper rejection of a claim under 35 U.S.C. § 102(b), the cited reference must disclose all elements/methods of the claim. *See, e.g., E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430 (Fed. Cir. 1988). Because of the following discussion, Applicant respectfully submits that neither Heuchemer, Baumann, nor Bump disclose all of the elements of claims 1 or 17. Thus, Applicant requests that the rejections be withdrawn as to these claims.

**i. Heuchemer does not disclose a closure lid as recited in claims 1 and 17**

Claim 1 recites “a closure lid configured to be inserted within said open end and adapted to engage in a sealing relationship with said inner wall.” Also, claim 17 recites “providing a closure lid adapted to be received within the open end and adapted to engage in a sealing relationship with said inner surface.” Heuchemer does not disclose these features. Heuchemer discloses a container (12), closure lid (14) and three-part lever mechanism (26, 22, 30) that effectuates proper closure of the lid atop the container (12). Most notably, however, the closure lid (14) in Heuchemer is configured to sit on top of the distal end of the container (12) (See Fig. 2), not within the open end of the container as recited in claims 1 and 17.

Furthermore, because the closure lid (14) sits atop the container (12) in Heuchemer, it does not contact the inner wall of the container (12) and, therefore, is not “adapted to engage in a sealing relationship with the inner wall” of the container, as recited in claim 1. Thus, for at least these reasons, Applicant respectfully submits that claims 1 and 17 are novel in light of Heuchemer.

**ii. Baumann does not disclose a closure lid as recited in claims 1 and 17**

As previously discussed, claims 1 and 17 recite features that are not taught or otherwise disclose in Heuchemer. Baumann also does not teach these features. Baumann specifically teaches a container (80), lid frame (50) and pivotally mounted lid (12). Figure 1 in Baumann illustrates that the lid frame (50) is affixed to the top of the container (80) and that the lid (12) and lid frame (50) are attached via a lever mechanism (20). Therefore, Baumann’s lid (12) does not fit within the container (80). Thus, for at least this reason, Applicant respectfully submits that claims 1 and 17 are novel in light of Baumann.

**iii. Baumann does not disclose a compression link recited in claims 1 and 17**

Furthermore, claims 1 and 17 recite “a compression link having a container engagement surface and a closure lid engagement surface.” Baumann also does not disclose this feature. The Office Action states that elements 13 and 46 in Baumann disclose a compression link. These elements are referred to in Baumann as a tension spring and compression spring, respectively. However, the tension spring (13) and compression spring (46) do not in any way resemble the compression link disclosed in claims 1 and 17. Specifically, elements 13 and 46 do not have a container engagement surface and a closure lid engagement surface.

The tension spring (13) in Baumann operates by exerting force on a two-armed lever (21) thereby allowing the closure lid to move back to its resting place following a user’s release of the pedal (30). Col.4, lines 52-57. The tension spring (13) is connected to the two-armed lever (21) and the inside of the lid frame (50); it does not touch the closure lid (12) or the container (80). Thus, the tension spring (13) has neither a closure lid engagement surface nor a container engagement surface.

Likewise, the compression spring (46) does not have a container engagement surface. The compression spring (46) is part of the maintenance signal system (40). Col. 5, lines 33-40. It is disposed between a plate (43) – which fits within a recess in the underside of the lid (Col. 5, lines 34-35) – and the underside (41) of the lid (12) itself. While the compression spring touches the lid, it does not encounter the container and therefore cannot be said to have a container engagement surface. Thus, Applicant respectfully submits that, because of at least these reasons, claims 1 and 17 are novel in light of Baumann.

- iv. **The compression link in Bump is configured to ease lid removal unlike the compression link in claims 1 and 17 which are configured to retain the closure lid**

Bump discloses a slanted door (20), or closure lid, for use on a truck mounted service compartment. Col. 2, lines 35-40. When closed, the lid (20) is attached to the truck compartment (27) via a door hinge (25), sealed via a door seal (24), and kept closed via a latch (23). See Col. 2, lines 35-40; Figure 2. Attached to the lid (20) and compartment (27) is a brace (31) which includes a compression member (33). Col. 4, lines 10-20.

It is arguable that element 33 is the only part of Bump that could be termed a “compression member,” however, the Office Action terms elements 31 and 33 as the compression member. If element 33 were to be the “compression member” then claims 1 and 17 would be novel on the grounds that the “compression member” in Bump does not have a container engagement surface or a closure lid engagement surface.

Nonetheless, this terminology makes no difference; Bump is distinguishable on other grounds. Elements 31 and 33 in Bump are configured to “help[] raise the [lid] when unlatched.” Col. 4, line 22. This is directly opposite of the compression element in claims 1 and 17 which are configured to *retain the closure lid*. Thus, for at least these reasons, Applicant respectfully submits that claims 1 and 17 are novel in light of Bump.

## **B. Discussion of Claims 1-4, 6-10, 17, 19, 21-22, 25, 27, 29-31, 33**

### **1. Statement of the Rejection (Claims 1-4, 6-10, 17, 19, 21-22, 25, 27, 29-31, 33)**

Claims 1-4, 6-10, 17, 19, 21-22, 25, 27, 29-31, and 33 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Meyer (US Pat. No. 4,016,096). More specifically, the Office Action states:

As per claims 1, 17, 25, Meyer discloses a storage system comprising a container having a wall with an outer surface and an inner surface and a first open end, the container defining an interior, a closure lid (11) configured to be inserted within the open end and adapted to engage in a sealing relationship with the inner surface; and a compression link (6) having a container engagement surface and a closure lid engagement surface, the compression link being configured to engage between the closure lid and the inner surface to retain the closure lid in sealing engagement with the container, the container engagement surface and the closure lid engagement surface being configured to extend outwardly from each other, the container engagement surface being adapted to engage the inner surface and the closure lid engagement surface being adapted to engage the closure lid such that, the closure lid is retained in sealing engagement with the inner surface. See Meyer abstract, figs. 1-4, column 1, col.2 lines 35-68, col. 3 lines 1-25, and col. 4 lines 26-31.

In addition, Meyer discloses an outer lid (25) configured to engage a distal end of the container, wherein the outer lid has a lid hold-down member (26) associated therewith for retaining the outer lid by exerting force on the outer surface of the wall of the container. See Meyer fig. 3, col. 1 lines 53-60, col. 2 lines 33-40, and col. 3 lines 1-25. Meyer also discloses engaging the compression link between the closure lid and the inner surface such that the closure lid is retained by placing a portion of the closure lid under compression and a corresponding portion of the inner surface under tension. See Meyer fig. 3.

As per claim 2, Meyer discloses the inner surface having a closure lid retention lid retention ledge (58) formed thereon, and wherein the container engagement surface of the compression link is adapted to engage the closure lid retention ledge (58). See Meyer fig. 4.

As per claim 3, Meyer discloses the closure lid (11) having a stepped outer surface defining an annular region, and wherein the compression link (6) is adapted to be received with in the annular region. See Meyer figs. 1-4 and col. 5 lines 1-15.

As per claims 4, 29 Meyer discloses the inner surface having a recess (2) formed therein for receiving at least a portion of the compression link (6). See Meyer fig. 3.

As per claim 6, Meyer discloses an outer lid configured for engaging a distal end of the container such that the closure lid is disposed between the outer lid and the interior. See Meyer col. 3 lines 15-25.

As per claims 7, 21, 30, Meyer discloses a bearing member (52) configured to fit between the closure lid engagement surface and the container engagement surface of the compression link, wherein the bearing member engages the closure lid. See Meyer fig. 4, and col. 4 lines 25-35.

As per claims 8, 33, Meyer discloses an exothermic material, wherein the exothermic material has been inserted within the container and sealed therein. See Meyer col. 3, lines 1-15.

As per claim 9, Meyer discloses the outer lid (25) having a lid hold-down member (26) associated therewith for retaining the outer lid in sealing engagement with the

container. See Meyer fig. 3, col. 1 lines 53-60, col. 2 lines 33-40, and col. 3 lines 1-25.

As per claims 10, 31, Meyer discloses the closure lid (50') having a stepped outer surface (57), the stepped outer surface being adapted to engage the bearing member (52). See Meyer fig. 4, and col. 4 lines 1-5, 12-34.

As per claim 19, Meyer discloses providing an outer lid (25) configured for engaging a distal end of the container such that the closure lid (11) is disposed between the outer lid (25) and the interior; and retaining the outer lid (25) in sealing engagement with the container. See Meyer fig. 3.

As per claim 22, Meyer discloses inserting an exothermic material within the container prior to sealing the closure lid. See Meyer col. 3 lines 1-25.

As per claim 27, Meyer discloses the container being a single-walled container. See Meyer abstract, figs. 1-4, column 1, col. 2 lines 35-68, col. 3 lines 1-25, and col. 4 lines 26-31.

Office Action at pp. 4-7.

## **2. Response to the Rejection (Claims 1, 17, 25)**

For a proper rejection of a claim under 35 U.S.C. § 102(b), the cited reference must disclose all elements/methods of the claim. *See, e.g., E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430 (Fed. Cir. 1988). Because of the following discussion, Applicant respectfully submits that Meyer does not disclose all of the elements of claims 1, 17, or 25. Thus, Applicant requests that the rejection be withdrawn as to these claims.

### **i. Meyer does not disclose a closure lid as recited in Applicant's claims 1, 17, and 25**

Claim 1 recites "said container engagement surface being adapted to contact said inner surface and said closure lid engagement surface being adapted to engage said closure lid such that, said closure lid is retained in sealing engagement with said inner surface;" claim 17 recites "engaging said compression link between said closure lid and said inner surface such that said closure lid is retained by placing a portion of the closure lid under compression and a corresponding portion of inner surface under tension with said compression link contacting both

said closure lid and said inner surface,” and claim 25 recites “a compression link having a container engagement surface and a closure lid engagement surface, said compression link being configured to engage between and contact said closure lid and said inner surface to retain said closure lid in sealing engagement with said container.” These features are not disclosed by Meyer.

Meyer specifies a light lid (11) arranged on a seal (6) made of elastomer. Col. 2, lines 52-56. The Office Action terms this seal (6) the compression link. Based on Figure 1 and Figure 3, the compression link (6) sits against the inside of the container and holds the light lid (11) in place when the top or outer lid (25) is positioned over the light lid (11). Thus, the light closure lid (11) only contacts the outer lid (25) and the compression link (6) – it does not contact the inner wall of the container as recited in claims 1, 17, and 25. Thus, Applicant respectfully submits that claims 1, 17, and 25 are novel in light of Meyer.

**ii. Meyer “teaches away” from engaging the closure lid with the inner wall of the container**

Additionally, the closure lid (11) in Meyer is specified as a “light lid formed by a fairly thin wall circular plate... whose end part rests flat on the seal” (6). Col. 2, lines 53-56. Also, it is designed to attach to the outer lid (25) via a magnetic element (16) in order that it may be removed and replaced. Col. 2, lines 66-67; Col. 3, lines 4-10. Thus, because the lid is taught to be light and easily removable there is no reason – and thus no motivation – to make the lid encounter the inside wall of the container. In fact, doing so would likely lessen the sealing ability of the compression.

Moreover, upon re-placement of the lid (11) back on the container, Meyer is designed to draw the potentially contaminated part (23) of the seal (6) downward by the light lid’s angle iron



(12). Col. 3, lines 10-15. Adding to the lid (11) a portion that would contact the inner wall of the container would not allow the contaminated part (23) to be drawn downward by the lid's angle iron (12). Therefore, because the downward drawing of the contaminated part of the seal is an intended purpose of Meyer, it would be non-obvious for someone to make a change that would destroy this effect. Hence, Meyer teaches away from any addition that would cause the closure lid (11) to directly contact the inner wall of the container.

## **II. Claim Rejections – 35 U.S.C. § 103**

### **A. Discussion of the Rejection (Claims 5, 11-12, 20, 23-24, 26, 28, 32, and 34)**

#### **1. Statement of the Rejection (Claims 5, 11-12, 20, 23-24, 26, 28, 32, and 34)**

Claims 5, 11-12, 20, 23-24, 26, 28, 32, and 34 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Meyer (U.S. Pat. No. 4,016,096). More specifically, the Office Action states:

As per claims 5, 20, 28, Meyer teaches all aspects of the claims except for specifically stating that a backing member should be inserted between the closure lid and the compression link such that the insertion therebetween urges the compression link radially outwardly from the closure lid and positions the container engagement surface of the compression link for engagement with the inner surface. It would have been obvious to one of ordinary skill in the art at the time the invention was made to place a backing member between the closure lid and the compression link such that the insertion therebetween urges the compression link radially outwardly from the closure lid and positions the container engagement surface of the compression link for engagement with the inner surface in order to produce a tighter fit and hence a better seal, since the backing member would be used to occupy loose space. In addition, it was known to wedge a backing member between loose fitting objects in order to provide a better seal by reducing the space by which air/gas/liquid could occupy at that border between two adjacent objects.

As per claim 11, 23, 34, Meyer teaches all aspects of the claim except for explicitly stating that the exothermic material is spent nuclear fuel. Meyer does however teach the exothermic material being radioactive waste. See Meyer col. 1 lines 15-20, 65-69, and col. 3 lines 20-30. However, since spent nuclear fuel is in

fact a radioactive waste, it is the examiner's view that spent nuclear fuel is encompassed by Meyer teaching's of radioactive waste. Therefore, because these two exothermic materials were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the spent nuclear fuel in the container for radioactive waste.

As per claims 12, 32, Meyer teaches the outer surface having a recess formed therein, and wherein the hold-down member has a retention ledge configured to engage the recess. See Meyer fig. 3.

As per claim 24, Meyer teaches all aspects of the claim except for specifically stating that the stepped outer surface be made of a surface harder than the bearing member. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have the stepped outer surface be made of a surface harder than the bearing member, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

As per claim 26, Meyer teaches all aspects of the claim except for specifically stating that the closure lid lack holes for mechanical fasteners. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the closure lid lack holes for mechanical fasteners in order to provide seals that did not stress the container, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of suitability for the intended use as a matter of obvious design choice.

Office Action at pp. 7-9.

## **2. Response to the Rejection of Dependent Claims**

- i. Claims 2 – 12, 19 – 24 and 26 – 35 are allowable for at least the reason that they depend from allowable independent claims 1, 17 and 25, respectively**

As previously discussed, the features of independent claims 1, 17 and 25 are not disclosed or reasonably suggested by Meyer. Section I, *supra*. Furthermore, because claims 2 – 12, 19 – 24 and 26 - 35 depend from claims 1, 17 and 25, respectively, Applicant respectfully submits that the rejection as to these claims is rendered moot.

### III. Newly Added Claims

Upon entry of the amendments in this response, Applicants have added claims 36 – 40.

Applicants believe that the newly added claims are in condition for allowance. Specifically, claim 36 recites:

36. A storage system comprising:  
a container defining an interior and having an open end and a wall, the wall having an outer surface and an inner surface;  
***the inner surface of the container having a first annular ledge and a first annular recess,***  
the first annular ledge extending into the interior of the container,  
the first annular recess being located about a circumference of the inner surface and between the first annular ledge and the open end,  
the first annular recess having an upper surface;  
a closure lid sized and shaped to be inserted within the open end of the container and to engage in a sealing relationship with the inner surface of the wall,  
***the closure lid having a second annular recess formed about an outer periphery thereof, the second annular recess being defined by a lower surface,***  
the closure lid being movable between an open position, in which the closure lid is disengaged from a sealing relationship with the container, and ***a closed position, in which the closure lid is inserted within the open end of the container and contacts and is supported by the first annular ledge, the first annular ledge preventing further movement of the closure lid into the interior of the container;*** and  
a compression link sized and shaped to engage between and contact the closure lid and the inner surface to retain said closure lid in sealing engagement with said container,  
the compression link having a container engagement surface and a closure lid engagement surface, the container engagement surface and said closure lid engagement surface being operative to extend outwardly from each other such that, ***when the closure lid is in the closed position and the compression link is positioned to retain the closure lid in the sealing relationship with the container, said container engagement surface contacts the upper surface of the first annular recess of the inner wall and the closure lid engagement surface contacts the lower surface of the second annular recess of the closure lid.***  
(Emphasis Added).

Applicants respectfully assert that the prior art of record does not teach or reasonably suggest, either individually or in combination, at least the features/limitations emphasized above in claim 36. Therefore, Applicants respectfully assert that claim 36 is in condition for allowance.

Since claims 37 – 40 are dependent claims that incorporate all the features/limitations of claim 36, Applicants respectfully assert that these claims also are in condition for allowance.

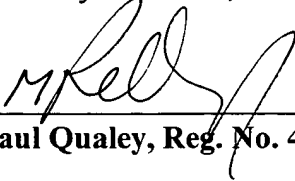
#### **IV. Prior Art Made of Record**

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

### **CONCLUSION**

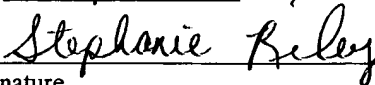
In light of the foregoing amendments and for at least the reasons set forth above, Applicants respectfully submit that all rejections have been traversed or rendered moot, and that the now pending claims 1-12, 17, and 19-40 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,

  
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